

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/559,752
Source: IFWP
Date Processed by STIC: 08/08/2006

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IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/559,752

DATE: 08/08/2006
TIME: 09:30:06

Input Set : A:\16336-27PC.ST25.txt
Output Set: N:\CRF4\08082006\J559752.raw

3 <110> APPLICANT: UNIVERSITY OF WASHINGTON
4 LIEBER, Andre
5 SHAYAKHMETOV, Dmitry M.
7 <120> TITLE OF INVENTION: CAPSID-MODIFIED ADENOVIRUS VECTORS AND METHODS OF USING THE
SAME
9 <130> FILE REFERENCE: 16336-27PC
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/559,752
C--> 12 <141> CURRENT FILING DATE: 2005-12-06
14 <150> PRIOR APPLICATION NUMBER: US 60/466,858
15 <151> PRIOR FILING DATE: 2003-05-01
17 <160> NUMBER OF SEQ ID NOS: 8
19 <170> SOFTWARE: PatentIn version 3.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 185
23 <212> TYPE: PRT
24 <213> ORGANISM: adenovirus
26 <400> SEQUENCE: 1
28 Asp Lys Leu Thr Leu Trp Thr Thr Pro Ala Pro Ser Pro Asn Cys Arg
29 1 5 10 15
32 Leu Asn Ala Glu Lys Asp Ala Lys Leu Thr Leu Val Leu Thr Lys Cys
33 20 25 30
36 Gly Ser Gln Ile Leu Ala Thr Val Ser Val Leu Ala Val Lys Gly Ser
37 35 40 45
40 Leu Ala Pro Ile Ser Gly Thr Val Gln Ser Ala His Leu Ile Ile Arg
41 50 55 60
44 Phe Asp Glu Asn Gly Val Leu Leu Asn Asn Ser Phe Leu Asp Pro Glu
45 65 70 75 80
48 Tyr Trp Asn Phe Arg Asn Gly Asp Leu Thr Glu Gly Thr Ala Tyr Thr
49 85 90 95
52 Asn Ala Val Gly Phe Met Pro Asn Leu Ser Ala Tyr Pro Lys Ser His
53 100 105 110
56 Gly Lys Thr Ala Lys Ser Asn Ile Val Ser Gln Val Tyr Leu Asn Gly
57 115 120 125
60 Asp Lys Thr Lys Pro Val Thr Leu Thr Ile Thr Leu Asn Gly Thr Gln
61 130 135 140
64 Glu Thr Gly Asp Thr Thr Pro Ser Ala Tyr Ser Met Ser Phe Ser Trp
65 145 150 155 160
68 Asp Trp Ser Gly His Asn Tyr Ile Asn Glu Ile Phe Ala Thr Ser Ser
69 165 170 175
72 Tyr Thr Phe Ser Tyr Ile Ala Gln Glu
73 180 185
76 <210> SEQ ID NO: 2
77 <211> LENGTH: 185
78 <212> TYPE: PRT

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79 <213> ORGANISM: adenovirus
 81 <400> SEQUENCE: 2
 83 Asp Lys Leu Thr Leu Trp Thr Thr Pro Asp Pro Ser Pro Asn Cys Arg
 84 1 5 10 15
 87 Ile His Ser Asp Asn Asp Cys Lys Phe Thr Leu Val Leu Thr Lys Cys
 88 20 25 30
 91 Gly Ser Gln Val Leu Ala Thr Val Ala Ala Leu Ala Val Ser Gly Asp
 92 35 40 45
 95 Leu Ser Ser Met Thr Gly Thr Val Pro Ser Val Ser Ile Phe Leu Arg
 96 50 55 60
 99 Phe Asp Gln Asn Gly Val Leu Met Glu Asn Ser Ser Leu Lys Lys His
 100 65 70 75 80
 103 Tyr Trp Asn Phe Arg Asn Gly Asn Ser Thr Asn Ala Asn Pro Tyr Thr
 104 85 90 95
 107 Asn Ala Val Gly Phe Met Pro Asn Leu Leu Ala Tyr Pro Lys Thr Gln
 108 100 105 110
 111 Ser Gln Thr Lys Asn Asn Ile Val Ser Gln Val Tyr Leu His Gly Asp
 112 115 120 125
 115 Lys Thr Lys Pro Met Ile Leu Thr Ile Thr Leu Asn Gly Thr Ser Glu
 116 130 135 140
 119 Ser Thr Glu Thr Ser Glu Val Ser Thr Tyr Ser Met Ser Phe Thr Trp
 120 145 150 155 160
 123 Ser Trp Glu Ser Gly Lys Tyr Thr Thr Glu Thr Phe Ala Thr Asn Ser
 124 165 170 175
 127 Tyr Thr Phe Ser Tyr Ile Ala Gln Glu
 128 180 185
 131 <210> SEQ ID NO: 3
 132 <211> LENGTH: 182
 133 <212> TYPE: PRT
 134 <213> ORGANISM: adenovirus
 136 <400> SEQUENCE: 3
 138 Asp Pro Leu Thr Leu Trp Thr Thr Pro Asp Pro Pro Pro Asn Cys Ser
 139 1 5 10 15
 142 Leu Ile Gln Glu Leu Asp Ala Lys Leu Thr Leu Cys Leu Thr Lys Asn
 143 20 25 30
 146 Gly Ser Ile Val Asn Gly Ile Val Ser Leu Val Gly Val Lys Gly Asn
 147 35 40 45
 150 Leu Leu Asn Ile Gln Ser Thr Thr Thr Val Gly Val His Leu Val
 151 50 55 60
 154 Phe Asp Glu Gln Gly Arg Leu Ile Thr Ser Thr Pro Thr Ala Leu Val
 155 65 70 75 80
 158 Pro Gln Ala Ser Trp Gly Tyr Arg Gln Gly Gln Ser Val Ser Thr Asn
 159 85 90 95
 162 Thr Val Thr Asn Gly Leu Gly Phe Met Pro Asn Val Ser Ala Tyr Pro
 163 100 105 110
 166 Arg Pro Asn Ala Ser Glu Ala Lys Ser Gln Met Val Ser Leu Thr Tyr
 167 115 120 125
 170 Leu Gln Gly Asp Thr Ser Lys Pro Ile Thr Met Lys Val Ala Phe Asn
 171 130 135 140

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174 Gly Ile Thr Ser Leu Asn Gly Tyr Ser Leu Thr Phe Met Trp Ser Gly
175 145 150 155 160
178 Leu Ser Asn Tyr Ile Asn Gln Pro Phe Ser Thr Pro Ser Cys Ser Phe
179 165 170 175
182 Ser Tyr Ile Thr Gln Glu
183 180
186 <210> SEQ ID NO: 4
187 <211> LENGTH: 182
188 <212> TYPE: PRT
189 <213> ORGANISM: adenovirus
191 <400> SEQUENCE: 4
193 Asp Pro Leu Thr Leu Trp Thr Thr Pro Asp Pro Pro Pro Asn Cys Thr
194 1 5 10 15
197 Leu Arg Gln Glu Leu Asp Ala Lys Leu Thr Leu Cys Leu Thr Lys Asn
198 20 25 30
201 Glu Ser Ile Val Asn Gly Ile Val Ser Leu Ile Gly Val Lys Gly Asp
202 35 40 45
205 Leu Leu His Ile Gln Pro Thr Thr Thr Val Gly Leu His Leu Val
206 50 55 60
209 Phe Asp Arg Gln Gly Arg Leu Val Thr Thr Pro Thr Ala Leu Val
210 65 70 75 80
213 Pro Gln Ala Ser Trp Gly Tyr Lys Gln Gly Gln Ser Val Ser Ser Ser
214 85 90 95
217 Ala Val Ala Asn Ala Leu Gly Phe Met Pro Asn Val Ser Ala Tyr Pro
218 100 105 110
221 Arg Pro Asn Ala Gly Glu Ala Lys Ser Gln Met Leu Ser Gln Thr Tyr
222 115 120 125
225 Leu Gln Gly Asp Thr Thr Lys Pro Ile Thr Met Lys Val Val Phe Asn
226 130 135 140
229 Gly Asn Ala Thr Val Asp Gly Tyr Ser Leu Thr Phe Met Trp Thr Gly
230 145 150 155 160
233 Val Ser Asn Tyr Leu Asn Gln Gln Phe Ser Thr Pro Ser Cys Ser Phe
234 165 170 175
237 Ser Tyr Ile Ala Gln Glu
238 180
241 <210> SEQ ID NO: 5
242 <211> LENGTH: 185
243 <212> TYPE: PRT
244 <213> ORGANISM: adenovirus
246 <400> SEQUENCE: 5
248 Asp Lys Arg Thr Leu Trp Thr Thr Pro Asp Thr Ser Pro Asn Cys Lys
249 1 5 10 15
252 Ile Asp Gln Asp Lys Asp Ser Lys Leu Thr Leu Val Leu Thr Lys Cys
253 20 25 30
256 Gly Ser Gln Ile Leu Ala Asn Val Ser Leu Ile Val Val Asp Gly Lys
257 35 40 45
260 Tyr Lys Ile Ile Asn Asn Asn Thr Gln Pro Ala Leu Lys Gly Phe Thr
261 50 55 60
264 Ile Lys Leu Leu Phe Asp Glu Asn Gly Val Leu Met Glu Ser Ser Asn

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265 65 70 75 80
 268 Leu Gly Lys Ser Tyr Trp Asn Phe Arg Asn Glu Asn Ser Ile Met Ser
 269 85 90 95
 272 Thr Ala Tyr Glu Lys Ala Ile Gly Phe Met Pro Asn Leu Val Ala Tyr
 273 100 105 110
 276 Pro Lys Pro Thr Ala Gly Ser Lys Lys Tyr Ala Arg Asp Ile Val Tyr
 277 115 120 125
 280 Gly Asn Ile Tyr Leu Gly Gly Lys Pro Asp Gln Pro Val Thr Ile Lys
 281 130 135 140
 284 Thr Thr Phe Asn Gln Glu Thr Gly Cys Glu Tyr Ser Ile Thr Phe Asp
 285 145 150 155 160
 288 Phe Ser Trp Ala Lys Thr Tyr Val Asn Val Glu Phe Glu Thr Thr Ser
 289 165 170 175
 292 Phe Thr Phe Ser Tyr Ile Ala Glu Gln
 293 180 185
 296 <210> SEQ ID NO: 6
 297 <211> LENGTH: 194
 298 <212> TYPE: PRT
 299 <213> ORGANISM: adenovirus
 301 <400> SEQUENCE: 6
 303 Ser Ile Asn Thr Leu Trp Thr Gly Ile Asn Pro Pro Pro Asn Cys Gln
 304 1 5 10 15
 307 Ile Val Glu Asn Thr Asn Thr Asn Asp Gly Lys Leu Thr Leu Val Leu
 308 20 25 30
 311 Val Lys Asn Gly Gly Leu Val Asn Gly Tyr Val Ser Leu Val Gly Val
 312 35 40 45
 315 Ser Asp Thr Val Asn Gln Met Phe Thr Gln Lys Thr Ala Asn Ile Gln
 316 50 55 60
 319 Leu Arg Leu Tyr Phe Asp Ser Ser Gly Asn Leu Leu Thr Glu Glu Ser
 320 65 70 75 80
 323 Asp Leu Lys Ile Pro Leu Lys Asn Lys Ser Ser Thr Ala Thr Ser Glu
 324 85 90 95
 327 Thr Val Ala Ser Ser Lys Ala Phe Met Pro Ser Thr Thr Ala Tyr Pro
 328 100 105 110
 331 Phe Asn Thr Thr Arg Asp Ser Glu Asn Tyr Ile His Gly Ile Cys
 332 115 120 125
 335 Tyr Tyr Met Thr Ser Tyr Asp Arg Ser Leu Phe Pro Leu Asn Ile Ser
 336 130 135 140
 339 Ile Met Leu Asn Ser Arg Met Ile Ser Ser Asn Val Ala Tyr Ala Ile
 340 145 150 155 160
 343 Gln Phe Glu Trp Asn Leu Asn Ala Ser Glu Ser Pro Glu Ser Asn Ile
 344 165 170 175
 347 Ala Thr Leu Thr Thr Ser Pro Phe Phe Phe Ser Tyr Ile Thr Glu Asp
 348 180 185 190
 351 Asp Asn
 355 <210> SEQ ID NO: 7
 356 <211> LENGTH: 196
 357 <212> TYPE: PRT
 358 <213> ORGANISM: adenovirus

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360 <400> SEQUENCE: 7
362 Asn Ile Asn Thr Leu Trp Thr Gly Ile Asn Pro Thr Glu Ala Asn Cys
363 1 5 10 15
366 Gln Met Met Asp Ser Ser Glu Ser Asn Asp Cys Lys Leu Ile Leu Thr
367 20 25 30
370 Leu Val Lys Thr Gly Ala Leu Val Thr Ala Phe Val Tyr Val Ile Gly
371 35 40 45
374 Val Ser Asn Asn Phe Asn Met Leu Thr Thr Tyr Arg Asn Ile Asn Phe
375 50 55 60
378 Thr Ala Glu Leu Phe Phe Asp Ser Ala Gly Asn Leu Leu Thr Ser Leu
379 65 70 75 80
382 Ser Ser Leu Lys Thr Pro Leu Asn His Lys Ser Gly Gln Asn Met Ala
383 85 90 95
386 Thr Gly Ala Ile Thr Asn Ala Lys Ser Phe Met Pro Ser Thr Thr Ala
387 100 105 110
390 Tyr Pro Phe Asn Asn Asn Ser Arg Glu Lys Glu Asn Tyr Ile Tyr Gly
391 115 120 125
394 Thr Cys His Tyr Thr Ala Ser Asp His Thr Ala Phe Pro Ile Asp Ile
395 130 135 140
398 Ser Val Met Leu Asn Gln Arg Ala Ile Arg Ala Asp Thr Ser Tyr Cys
399 145 150 155 160
402 Ile Arg Ile Thr Trp Ser Trp Asn Thr Gly Asp Ala Pro Glu Gly Gln
403 165 170 175
406 Thr Ser Ala Thr Thr Leu Val Thr Ser Pro Phe Thr Phe Tyr Tyr Ile
407 180 185 190
410 Arg Glu Asp Asp
411 195
414 <210> SEQ ID NO: 8
415 <211> LENGTH: 12
416 <212> TYPE: PRT
417 <213> ORGANISM: adenovirus
419 <400> SEQUENCE: 8
421 Ser Lys Cys Asp Cys Arg Gly Glu Cys Phe Cys Asp
422 1 5 10

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/559,752

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Input Set : A:\16336-27PC.ST25.txt

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L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date